



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Stuart

Examiner:

Serial No.: 10/772,904

Group: Art Unit:

Filed: February 5, 2004

Docket: 1278-5 (11846 US2)

For: POST ANCHOR

Dated: February 27, 2004

Commissioner of Patents
P.O. Box 1450
Alexandria, VA 22313-1450

TRANSMITTAL LETTER

Sir:

Enclosed is a certified copy of Australian Appln. No. 2003900482 filed February 5, 2003 and from which priority is claimed under 35 U.S.C. § 119.

Respectfully submitted,

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CERTIFICATE OF MAILING 37 C.F.R. § 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as First Class Mail in an envelope, addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA, 22313-1450 on February 27, 2004

February 27, 2004

Michael E. Carmen



**Patent Office
Canberra**

I, JULIE BILLINGSLEY, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2003900482 for a patent by IAN MATEAR STUART as filed on 05 February 2003.

WITNESS my hand this
Sixteenth day of February 2004

A handwritten signature in cursive script that reads "J. Billingsley".

JULIE BILLINGSLEY
TEAM LEADER EXAMINATION
SUPPORT AND SALES

AUSTRALIA

Patents Act 1990

PROVISIONAL SPECIFICATION

Invention Title: "POST ANCHOR"

The invention is described in the following statement:

TITLE

POST ANCHOR

FIELD OF THE INVENTION

5 This invention relates to a post anchor. In particular, the post anchor is used for holding fencing posts, sign posts or the like and therefore will be described in this context. However, it will be appreciated that the post anchor may be used to hold posts for other uses.

BACKGROUND OF THE INVENTION

10 Most sign posts and fencing posts are permanently fixed in position within the ground. Normally, a post is fixed in position by digging a hole within the ground, locating the post within the hole, pouring concrete around the post and allowing the concrete to set.

This process is very time consuming and labour intensive. Further, the above process is not conducive when providing temporary posts
15 for signage or fencing.

To overcome the above disadvantages, post anchors have been developed in which each post anchor is driven in the ground and a post attached to the post anchor. Examples of such posts are shown in US Patent No. 6,039,298, US Patent No. 4,588,157 and US Patent No.
20 2,349,110.

Although these types of post anchors are effective, they are expensive to manufacture due to the number of components that must be joined together to form the post anchor. Further, most of the anchors that are produced use heavy-duty components that add to the cost of the post

anchor. Hence, the cost of producing the post anchors has limited the use of the post anchor to specific applications.

OBJECT OF THE INVENTION

It is an object of the invention to overcome or alleviate one or more of the above disadvantages or provide the consumer with a useful or commercial choice.

SUMMARY OF THE INVENTION

In one form, although not necessarily the only or broadest form, the invention resides in a post anchor comprising:

- 10 a holder to receive and hold at least one post;
- a ground engaging member for driving in a ground surface, said ground engaging member attached to the holder;
- said ground engaging member including a central web, a first flange and a second flange;
- 15 said first flange extending away from a first side of the central web and said second flange extending away from a second side of the central web;
- wherein said central web, first flange and second flange are integrally formed.

20 The holder may comprise a plurality of collets to hold the post. A clamping member may be located around the collets to prevent the post being removed from the collets.

Alternately, the holder may be a recess to which a post is fastened.

The central web may be substantially planar. A point may be located adjacent an end of the central web to assist in driving the central web into the ground.

The first flange and second flange may be substantially planar.

5 The first flange, second flange and central web may be formed from a single sheet of metal. The sheet may be folded to form the first flange, second flange and central web.

The angled formed between the first flange and central web and/or the second flange and central web may be obtuse.

10 The holder may be welded to the engaging member. Preferably, the holder is welded to the central web.

In another form, the invention resides in a method of manufacturing a post anchor comprising the steps of:

15 folding a single sheet of metal to form a ground engaging member having a central web, a first flange and a second flange;

 said first flange extending away from a first side of the central web and said second flange extending away from a second side of the central web; and

20 attaching a holder to the ground engaging member to form the post anchor.

The method may further include the step of cutting the sheet of metal.

BRIEF DESCRIPTION OF THE DRAWINGS

An embodiment of the invention, by way of example only, will

be described with reference to the accompanying drawings in which:

FIG. 1 is a perspective view of a post anchor according to an embodiment of the invention;

FIG. 2 is a front view of the post anchor shown in FIG. 1;

5 FIG. 3 is a perspective view of a ground engaging member prior to being folded;

FIG. 4 is a perspective view of the ground engaging member of FIG. 3 after the ground engaging member has been folded; and

10 FIG. 5 is a top view of a fence constructed using the post anchors shown in FIG. 1.

FIG. 6 is a further top view of another fence constructed using the post anchors shown in FIG. 1.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

15 FIGS. 1 and 2 show a post anchor 10 comprising a holder 20 and a ground engaging member 30. The post anchor holds a post (not shown) securely with respect to ground. The post may be used to carry signage, or may form part of a fence, or may be used for other like purposes.

20 The holder 20 is used to hold the post within the post anchor 10. The holder 20 is formed from two collets 21,22 that define a space in which the post sits. A clamping member 23 engages a ridge 24 located on each of the collets, thereby urging the collets into engagement with the post.

 The ground engaging member 30 includes a central web 31, a first flange 32 and a second flange 33. The central web 31 has its lower end formed into a point to assist in driving the ground engaging member into

ground.

The first flange 32 extends outwardly away from a first side 35 of the central portion whilst the second flange 33 extends outwardly from a second side 36 of the central web 31. That is, the first flange 32 is located on an opposite side of the central web 31 to that of the second flange.

An angle formed between the central web 31 and the first flange 32 and an angle formed between the central web 31 and the second flange 33 is obtuse. Further, the angles are substantially the same. Both the first flange 31 and the second flange 32 are tapered.

The ground engaging member 30 is produced from a planar metal sheet that has been cut to the desired shape as shown in FIG. 3. It should be appreciated that the metal sheet may be cut by any means including punching, laser cutting, water cutting, etc.

Once the sheet has been cut to the desired shape, the metal sheet is folded to form the ground engaging member 30. The collets 21,22 are then welded to a space located on the central web of ground engaging member 30 to complete manufacture of the ground anchor 10.

FIG. 5 & FIG. 6 show top views of fences 40 that have been produced using the post anchors. The first flange 32 and second flange 33 of each anchor 10 provide lateral stability to the fences 40. The lateral stability is greatest at the top of the ground engaging member 30 where the width of the first flange 32 and second flange 33 is greatest. The central web 31 also provides some lateral stability. The central web 31 provides sufficient longitudinal stability to the fences 40.

The lateral stability of the fences 40 need to greater than the longitudinal stability. The post anchor 10 provides this through its configuration.

5 The post anchor 10 provides the advantage that its configuration provides stability using a minimum amount of material. Further, the post anchor 10 is uncomplicated to manufacture making the post anchor cost effective. Still further, the post anchor can be easily driven into ground using known techniques used for driving other post anchors into ground.

10 It should be appreciated that various other changes and modifications may be made to the embodiment described without departing from the spirit or scope of the invention.

DATED this Fifth day of February 2003.

15

IAN MATEAR STUART

By his Patent Attorneys

FISHER ADAMS KELLY

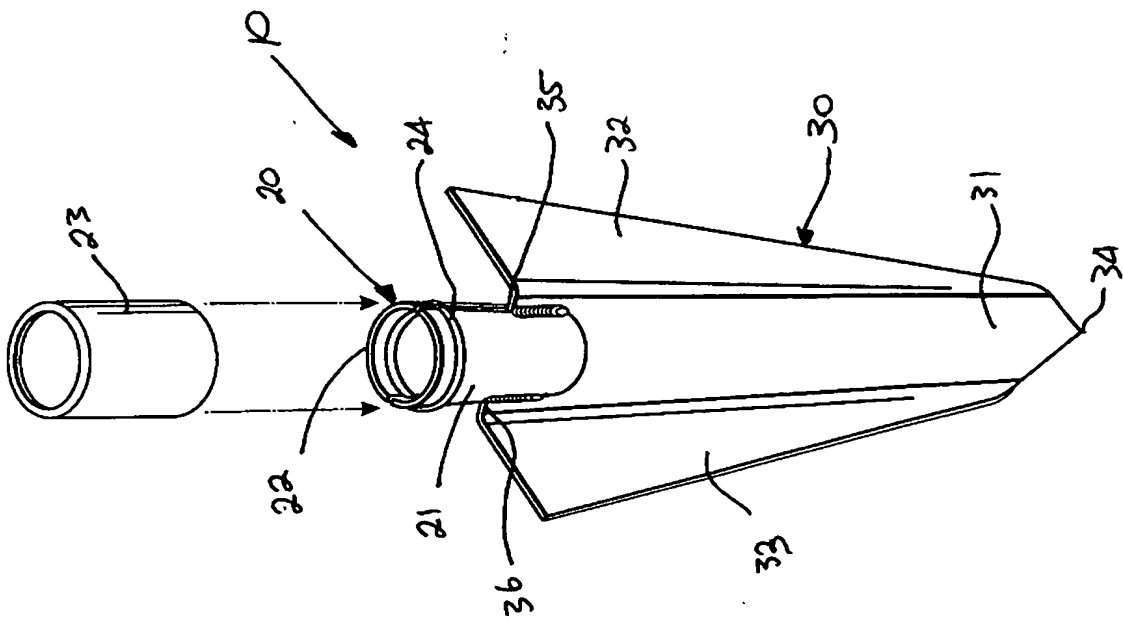


FIG. 1

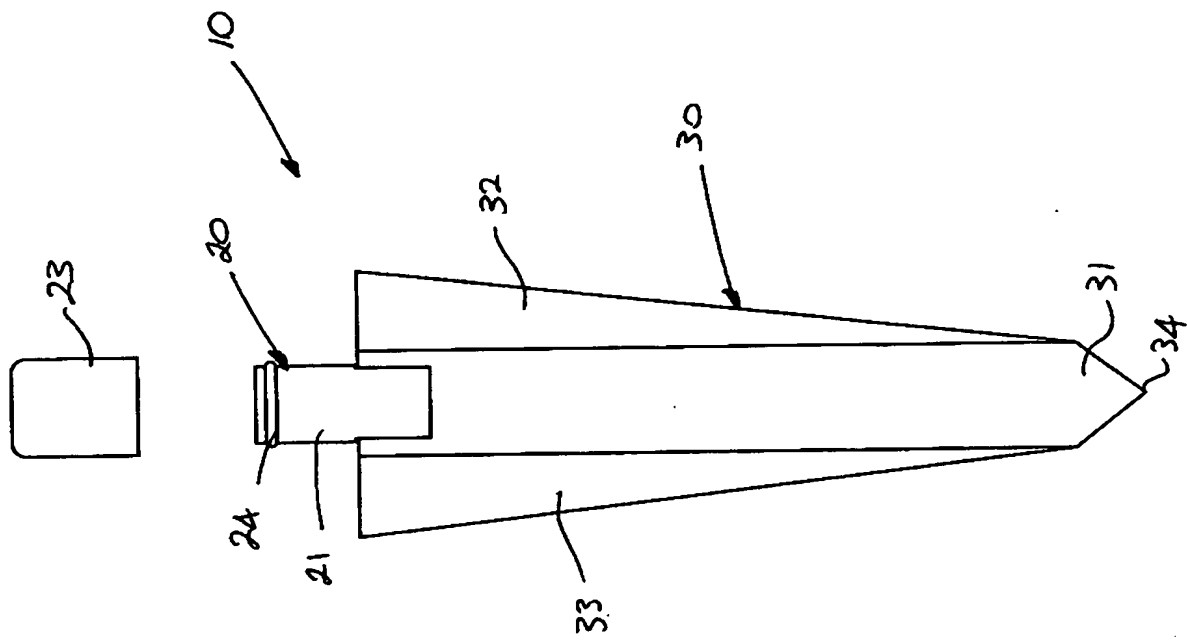


FIG. 2

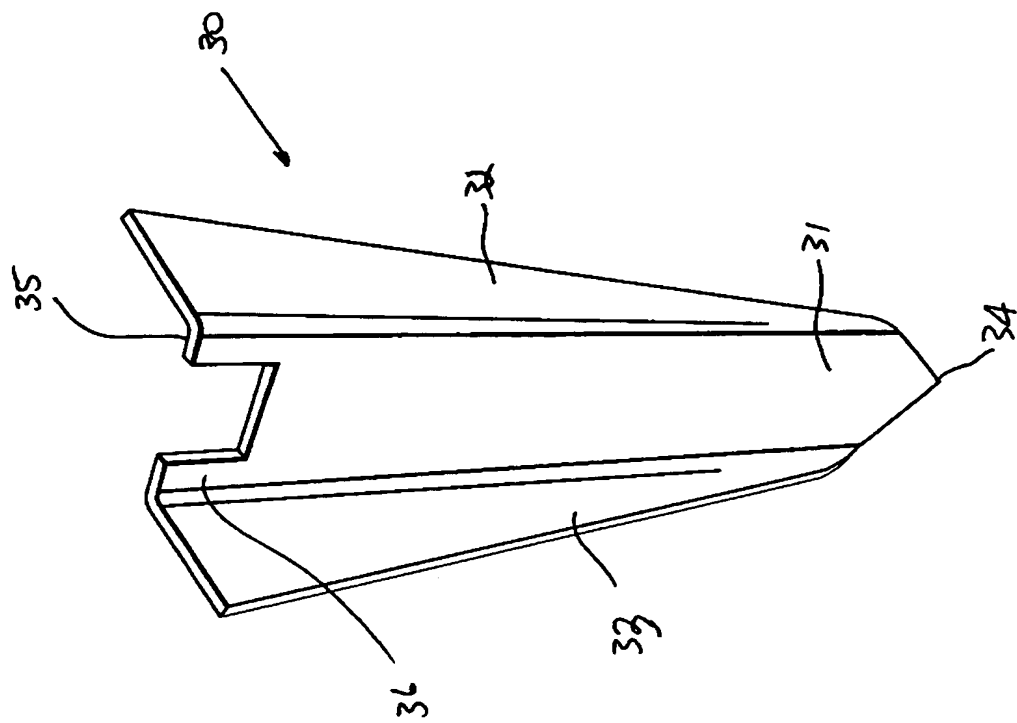


FIG. 4

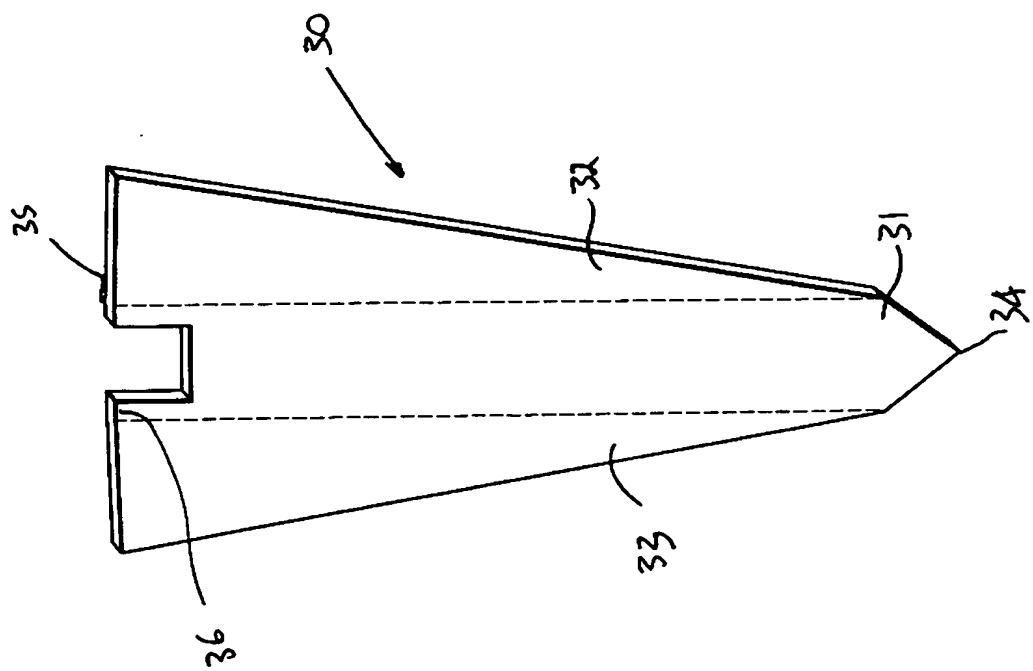


FIG. 3

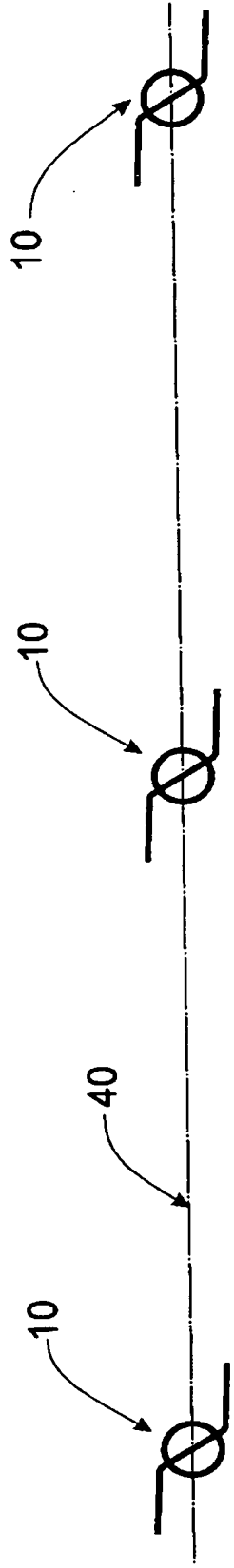


FIG. 5

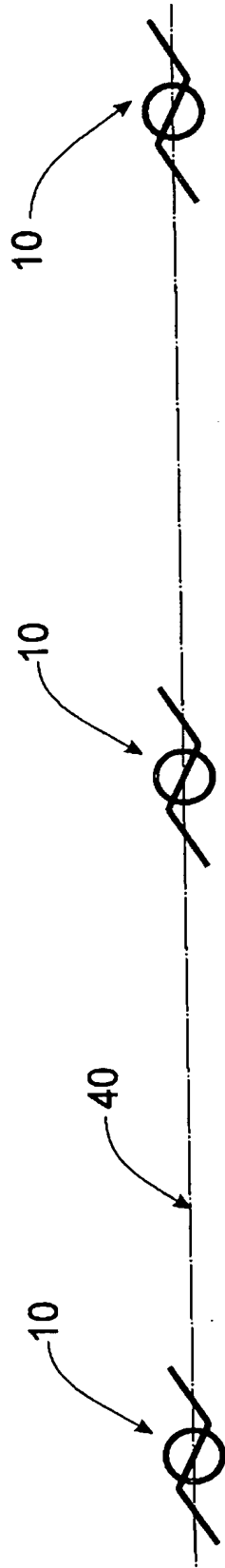


FIG. 6